

Table 1

Comparison Of Mankovitz and Applicant's Inventions

| <u>Item</u> | <u>Mankovitz Roy J.</u> | <u>Applicant</u> |
|--|-------------------------|------------------|
| 1. Real-Time Bi-directional Communication | Yes | No |
| 2. Require Live Two-way Communication | Yes | No |
| 3. Require User Be At Site Of Controlled Object | Yes | No |
| 4. Multimedia Information Handling Capabilities | No | Yes |
| 5. Can Use DTMF To Transmit Information | Yes | Yes |
| 6. <i>Controlled Appliance Remote To The User</i> | <i>No</i> | <i>Yes</i> |
| 7. <i>Transmits Control Instruction To a Third Site</i> | <i>No</i> | <i>Yes</i> |
| 8. Multiple Forms Of User Input | No | Yes |
| 9. Requires The Human Contact At Remote Site | Yes | No |
| 10. Remote Site Determines When To Transmit Instructions | No | Yes |
| 11. Communicate Over The Internet | No | Yes |
| 12. Use Blue-Tooth Technology | No | Yes |
| 13. Able To Detect Incoming Calls | No | Yes |
| 14. Able To Operate Un-Attended | No | Yes |
| 15. Able To Initiate Activities When It Want To | No | Yes |

***TO ANTICIPATE A CLAIM, THE REFERENCE MUST TEACH EVERY ELEMENT
OF THE CLAIM***

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

> "When a claim covers several structures or compositions, either generically or as alternatives, the claim is deemed anticipated if any of the structures or compositions within the scope of the claim is known in the prior art." Brown v. 3M, 265 F.3d 1349, 1351, 60 USPQ2d 1375, 1376 (Fed. Cir. 2001) (claim to a system for setting a computer clock to an offset time to address the Year 2000 (Y2K) problem, applicable to records with year date data in "at least one of two-digit, three-digit, or four-digit" representations, was held anticipated by a system that offsets year dates in only two-digit formats). See also MPEP § 2131.02.

*< "The identical invention must be shown in as complete detail as is contained in the ... claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an ipsissimis verbis test, i.e., identity of terminology is not required. In re Bond, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990). Note that, in some circumstances, it is permissible to use multiple references in a 35 U.S.C 102 rejection. **From 2131 Anticipation MPEP § 2131.***

[HN3] Anticipation is a question of fact. In order to anticipate, there must be identity of invention; thus, the claimed invention, as described in appropriately construed claims, must be the same as that of the reference. More specifically, under 35 USCS 102 (b), a

patent claim is anticipated by a prior art reference if the reference discloses, either expressly or inherently, each and every element of the claimed patent. Every element of a claimed invention must be identically shown in a single reference for a prior art reference to anticipate. (Danny J. Elder and Enviro-Stain, Inc. Plaintiffs, v A.S.Tanner and Tanner Forest Products, Corp., Defendants; Case No. 1:98-CV-36; United States District Court For the Eastern District Of Texas, Beaumont Division; 180 F. Supp. 2nd 818; 2001 U.S. Dist. LEXIS 23054).

Failure Of Mankovitz, Roy J. As Prior Art To Applicants Invention

On the surface both Mankovitz's patent and the Applicant's patent application appear to be similar; both involve a computer/server at a remote location receiving information from a User, and controlling the future behavior of an appliance at a site other than the computer/server. However, a detail look at the two patents clearly reveals two separate and distinct inventions. Mankovitz's patent according to both the MPEP definition and the above court definitions does not anticipate the Applicant's invention, because they each contain dissimilar components. The proffered analysis summarized in Table 1 shows that 35 USC 102 should not be applied in this situation; Mankovitz and the Applicant's invention are very different from one another.

The determinant steps of the Applicant's invention are illustrated in Illustrations 1 – 3 and Tables 1. The Applicant's patent application teaches on forwarding information from the User at a remote location (location 1) to a Central Site for collection and processing (location 2), and on the Central Site forwarding the process information to

another remote targeted location (location 3) (Paragraphs 0004 & 0006). The Applicant's patent application teaches on an un-attended device (EA-Router) located at the remote targeted location being able to detect incoming calls that are carrying information from the Central Site (Applicant Paragraphs 0071 & 0094). The Applicant's patent application teaches on time delayed unidirectional communication between the User and the EA-Router at the targeted remote location via intermediate processing at a Central Site (Applicant Paragraph 0072 & 0073). The Applicant's patent application teaches on independent action on the part of the Central Site in deciding when to initiate action (Applicant Paragraph 0076), allowing for better management of scheduling of activities. The Applicant's patent application teaches on multiple forms of data input: i.e. voice over wired/wireless devices, DTMF-tones over wired/wireless devices, Internet, and Fax (Applicant Paragraphs 0088 & 0091). The Applicant's patent application teaches on communicating instructions from the User to the remote targeted location over communication networks such as Public Switch Telephone Network (PSTN), and the Internet (Applicant Paragraphs 0072 & 0088). The Applicant's patent application teaches on the EA-Router communicating instructions to a targeted appliance using Blue-Tooth technology (Applicant Paragraph 0102).

Mankovitz's patent teaches on the User being located at the site of the appliance that is to be programmed / controlled (Col. 1, lines 32 – line 51 and Col. 3, line 48 – line 55). Mankovitz's patent teaches on a remote that receive instructional information for the user, processes the instructional information and returns it to the use in a single communication session (Col. 1, line 32 – line 51 & Col. 2, line 19 – line 29 & Col. 3, line

47 - 60). Mankovitz's patent teaches on the User having to be in two-way contact with a person at the remote site at the time of the programming of the targeted device (Figure 1 – 7 and Col. 1, line 32 – line 51 & Col. 5, line 39 – line 48). Mankovitz's patent teaches on communications between the User and the Remote Center being conducted over a standard telephone line (Col. 2, line 19 - 30), there is no mention of communicating over Internet in this patent. Mankovitz's patent teaches on human involvement in the programming process, be it placing the phone in proximity to the device that is to be programmed, or plugging the device that is to be programmed to a socket (Col. 1, line 41 – line 53 & Figures 1, 4, 5, 6, and 7 & Col. 4, line 43 – Col. 5, line 10).

Since all of the above steps of the Applicant's invention are not found in the prior art of Mankovitz's patent there can be no anticipation

Claim Objections

1. *Claim(s) 56 is objected to because of the following informalities: claim(s) 56 is not a full sentence. Correction is required.*

Claim 56 is a complete sentence, and is unchanged.

USC 35 102 – Anticipation

2. *The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:*

A person shall be entitled to a patent unless —

(a) the invention was known or used by others in this country, or patented or described in a printed

publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. *Claim(s) 56-87, 91, 94, 96, 100, 107, 108, and 111-125, rejected under 35 U.S.C. 102(a) as being anticipated by Mankovitz (US 5,915,026).*

Regarding claim(s) 56, 59, 67, 70, 78, 81, 91, 94, 96, 111-1 23 and 125, Mankovitz discloses a method for controlling one or more remote targeted devices over a communication network by accessing a central computer, selecting a specific targeted device at a remote location, and entering instruction that will control the future behavior of said targeted device at said remote location (FIG. 1 and column 1, lines 6-1 1),

comprising:

accessing a central computer using a plurality of remote data entry points (column 3, lines 48-65);

Mankovitz's invention teaches on accessing a technician by a standard telephone over a standard phone line, there is no teaching on plurality of remote data entry points. Mankovitz's patent teaches on having the User/Consumer use a standard phone to verbally communicate information to an "Assisting Programmer" at a remote location from their home with the appliance to be programmed (Col. 1, line 33 – line 44 and Col. 2 line 19 – line 29). A phone is the only type of communication device taught on in Mankovitz's patent, and the phone is usable only when the user is present (Col. 1, line 33 – line 44 and Col. 2 line 19 – line 29). Mankovitz's patent teaches on having the User/Consumer at the site of the targeted appliance and participating in the process of targeting the appliance (Figure 1, 2, 3, 4, 5, 6, 7, and 8 & Col. 1, line 33 – line 53, Col. 2 line 20 – line 29 & Col. 3, line 47 – 65 & Col. 5, line 11 – line 25).

In Figure 1, Mankovitz's patent illustrates that the handset of the phone must be held next to the microphone of programming module (Figure 1, Item 34, Figure 4 Item 34, and Figure 6 Item 34). In Figure 2 & 3 Mankovitz's patent teaches that sound (DTMF-tones) are being passed from the handset (Figure 2 & 3, Item 46a) to the programming module to be decoded before being passed on the targeted device (Col. 4, line 1 – line 10). The User/Consumer is the person that is holding the handset to the programming module, therefore the User/Consumer must be at the same location as the targeted appliance.

In Figure 7 & Figure 8 Mankovitz's patent teaches that the User/Consumer must be in two-way communication with the Remote site to effect programming (Figure 8, Items 78, 80, 88, and 96).

"In another embodiment, shown in , the use of telephones 46a and 47 shown in FIGS. 1 and 4-6 in the downloading of data to the programming module 20d is eliminated by replacing the microphone 34 in FIGS. 1 and 4-6 with modular telephone socket 35. A telephone 46b is still necessary in the system, however, for the consumer to communicate orally with the customer service representative as discussed more fully below in connection with FIG. 8."

This requirement that the User/Consumer physically participate in the programming of the targeted appliance negates the possibility that Mankovitz's patent anticipated the Applicant's invention.

accessing a central computer using a plurality of remote data entry modes (column 2, lines 42-45);

Mankovitz's patent does not teach on using a plurality of remote data entry modes. Mankovitz's patent states that communication between the Consumer and the "Assistant Programmer" is over a standard telephone (Col. 2 line 26 – line 28).

"Consumers and programming assistants communicate over standard telephones 46a and 46b and telephone lines 48."

Column 2, line 42 – 45 does not indicate plurality of remote data entry modes:

“Listed below are a variety of household appliances that might be programmed with the programming module system and examples of what type of information is stored in the computer 44 of the present system.”

a central computer able to process and store instructions inputted from a plurality of data entry points (column 2, lines 30-41);

Mankovitz’s patent teaches that the User/Consumer must be at the same location as that of the appliance that is to be programmed (Col. 1, line 35 – line 53), and that a standard phone is employed as the means for communicating between the Remote Site and the “Assistant Programmer” (Col. 2, line 20 – line 29 & Col. 8, line 23 – line 26). This clearly illustrate that inputted instructions are from a single data entry point: the location of the appliance (Figure 1). If the Examiner it saying that the Remote site can handle a number of customer calling from a number of different locations, then that is true, but it is not what the Applicant’s invention can do: accept faxed instructions, instructions conveyed over the Internet, or verbally convey instructions over a wired or wireless device from any location. This is a significant difference between Mankovitz’s invention and the Applicant’s invention.

Column 2, line 30 – 41 does not indicate a central computer able to process and store

instructions inputted from a plurality of data entry points:

“The computer 44 includes a real time clock that keeps track of the current time of day and the date. The computer can convert this real time into the correct real time for any locality, even those in different time zones when certain information, such as the state or ZIP code is entered into the computer. The computer also includes a database which contains information regarding a variety of consumer appliances. Each appliance is referenced by brand, model number, appliance type, features and descriptions of the exterior appearance. The data stored for each appliance depends on the type of information that can be programmed into that particular model and brand of appliance.”

a central computer able to determine if incoming instructions are authorized to be accepted and forwarded to a specific remote location (column 6, lines 23-43);

“The utilization of the programming system is shown in the flow diagram of FIG. 8. To begin, in block 78, a consumer will call the remote site programming center 40 over standard telephone lines 48. The telephone number for the remote site programming center can be a normal toll number, a toll-free "800" number or a fee per call or fee per minute "900" number. In block 80, the user identifies the programming module by reading an unique identification number that is imprinted onto each programming module. The programming assistant then enters this identification number into the computer 44. In block 82, the computer then

determines if the identification number has been used before with the system. If the identification number has been used before, the computer will retrieve all the information that has been previously given to the programming assistants by a consumer using that identification number and stored in the computer. On the other hand, if the programming module is being used for the first time, the identification number will not be found in the computer's storage and the computer, in block 86, sets aside a record in its storage for information regarding this new programming module.”

Mankovitz's patent teaches on a user reciting an identity number on the outside of the programming module to the “Assistant Programmer” at a Remote Site. The user can give a false number and claim that the programming module a new / un-registered module. The module itself does not forward its id to the “Assisting Programmer” over the telephone line (Col. 6, line 29 – line 33).

In the Applicant's invention both the EA-Router and the central server that process the information are able to verify if the incoming instructions are to be accepted. There is no need for someone to manually read in an identification number. This is another difference between the Applicant's invention and that of Mankovitz's invention.

a central computer able to forward instructions over a communication system to a chosen remote location where said instructions will be relayed to a targeted device (column 4, lines 27-34);

In Mankovitz's patent the Remote Site is able to forward instructions over a standard telephone line, in a manner totally different from that of the Applicant's invention.

Mankovitz's patent teaches on the "Assistant Programmer" at the remote site being able to collect information from the User/Consumer about what they want programmed, immediately packaging code to do what the User/Consumer wants done, and forwarding the package codes in the form of DTMF-tones back to the User/Consumer (Col. 3, line 48 – line 65). In the Applicant's invention the User/Consumer enter the information that they want programmed into a targeted device at a location remote to the User/Consumer. After the User/Consumer has terminated the connection to the Central Site, the Central Site will process the received information into instruction codes, and decide when it will forward the information to the targeted remote location (Applicant's Patent Application Paragraph 0076).

[0076] In this embodiment, the central site sends the code out anywhere from 5 to 10 minutes before the desired recording time. This reduces the size and amount of coding required to be sent. In another embodiment, the string of DTMF tones sent to the EA router 120A contains coding information for selecting date and time. In other embodiments, the central site may allow interaction with the user's device directly.

a targeted device accepting instructions that will control said device future behavior (column 4, lines 54-66).

In Mankovitz's patent, the teaching is for the consumer to participate in the targeting of the appliance that is to be programmed, by placing the handset next to the appliance (Figure 1, Item 20 & Figure 1, Item 34 & Col. 3, line 48 – line 65, Col. 5, line 10 – line 20), plugging the appliance to the programming module (Figure 5, Item 47a & Figure 6, Item 66, 68, 72 and 74 & Figure 7, Item 35), or by activating the download from a Remote Site into the targeted appliance (Figure 8, Items 96).

In the Applicant's invention, the EA-Router is able to independently recognize incoming instructions, target the appropriate appliance, and forward the instructions to the appliance all on its own. EA-Router is both superior and totally different from that of Mankovitz's invention. USC 35 102 does not apply to the Applicant's invention in regards to Mankovitz's invention.

Claims 56, 59, 67, 70, 78, 81, 91, 94, 96, 111- 123 and 125 are allowable.

Claims 57and 58 are allowable as being dependent from an allowable Claim

Claims 60 – 66 are allowable as dependent from an allowable Claim

Claims 68 and 69 are allowable as dependent from an allowable claim

Claims 71 – 77 are allowable as dependent from an allowable Claim

Claims 79 and 80 are allowable as dependent from an allowable claim

Claim 82 – 87 are allowable as dependent from an allowable claim

Regarding claim(s) 57, 60, 68, 71 and 79, Mankovitz discloses a method, further comprising:

a central computer receiving one or more DTMF tones over said communication network (column 2, lines 20-40); and

translating said tones into said instructions that can affect the future behavior of a specific device located at a remote location (column 2, lines 20-40).

Mankovitz's patent does not teach on the central server receiving DTMF-tone over the standard telephone line (Col. 2, line 27 – line 29 & Col. 2, line 37 – line 41) from the user. All teachings indicate that the User/Consumer communicate verbally, and that the output to the Remote Site is encoded in DTMF-tone (Col. 1, line 36 – line 46). The User/Consumer communicate verbally with the Programming Assistant, and the Programming Assistant uses his computer to generating DTMF-tones the encode instructions. The only way the central server would be able to accept DTMF-tone would be for the Programming Assistant to be able to translate them by ear, and require the sender to know before have what DTMF-tone encode combination signals for appliance type, model, or function to be performed. Mankovitz's patent does not teach on incoming DTMF-tone encode information to the Remote Site.

Mankovitz's patent does not teach central computer receiving one or more DTMF tones, therefore there are no DTMF-tone to be translated into instructions:

“Consumers and programming assistants communicate over standard telephones 46a and 46b and telephone lines 48.”

“The system provides a computer, operated by a programming assistant who consumers can call on the telephone. **Consumers tell the programming assistant what appliances they use in their homes, the models and brands of these appliances and details regarding how these appliances should be programmed. The programming assistant enters this information into the computer.** The computer generates codes containing setup information for the consumer's appliances that are downloaded over the telephone line to the programming module that the consumer holds near the earpiece of their telephone.”

“Each appliance is referenced by brand, model number, appliance type, features and descriptions of the exterior appearance.”

Claim(s) 57, 60, 68, 71 and 79 are allowable

Regarding claim(s) 58, 61, 69 and 72, Mankovitz discloses a method, further comprising: a central computer determining what information is encoded within a string of DTMF tones by analyzing order in which DTMF tones are received (column 4, lines 11-26); and generating instructional coding that corresponds to the detected sequence of DTMF tones (column 4, lines 11-26).

In Mankovitz's patent the central computer does not receive DTMF-tone, instructions are prepared by the Programming Assistant on computer, base on verbal input from the User about the targeted appliance, and what activity should be encode in the

DTMF-tones transmitted to the consumer location via a standard telephone encode (Col. 1, line 36 – line 46).

“The system provides a computer, operated by a programming assistant who consumers can call on the telephone. **Consumers tell the programming assistant what appliances they use in their homes, the models and brands of these appliances and details regarding how these appliances should be programmed. The programming assistant enters this information into the computer.** The computer generates codes containing setup information for the consumer's appliances that are downloaded over the telephone line to the programming module that the consumer holds near the earpiece of their telephone.”

Since no DTMF-tones are received at the central computer from the remote location, there can be no detection of encoded information. The cited section in Mankovitz's patent teaches on the programming module at the site of the appliance decoding incoming instructions from the central computer.

Claim(s) 58, 61, 69 and 72 are allowable

Regarding claim(s) 62 and 73, Mankovitz discloses a method, wherein the DTMF tones encoding information are transmitted by a central server over a telecommunication network to a site remote to both the server and the remote data entry terminal (column 4, lines 1-10).

The citation of *column 4 lines 1 to 10*, does not teach on the subject indicated by the Examiner.

“shown in FIGS. 2 and 3. FIG. 2 shows a combination with an amplifier 50 which leads into a DTMF decoder 52. DTMF tones are received by the microphone 34 from the receiver 46a. Each DTMF tone is amplified and decoded by amplifier 50 and DTMF decoder 52 to produce the numerical value represented by the DTMF tone. Depending on the specific type of DTMF decoder which is utilized, either a serial or parallel representation of the decoded numeric value is sent to an I/O input of the microprocessor 22 of the programming module 20.”

The Mankovitz’s patent teaches only on two locations: site of the “Assisting Programmer” and his computer and the site of the customer and the appliance that is to be programmed (Col. 1, line 36 – line 53 & Col. 2, line 20 line 29). Mankovitz’s patent teaches on the need to have the customer at the location of the appliance that is to be programmed, at the time of the programming.

The Applicant’s invention teaches on three locations: the site of the User with a remote input terminal, the central data collection site, and the remote location of the appliance that is to be programmed. The Applicant’s patent application repeatedly teaches on three distinct locations in Paragraphs 0004, 0005, 0006, 0035, and 0071. There is no need for the User to be present at the site of the targeted appliance in the Applicant’s invention.

[0004] The present invention allows users to remotely set their media recording devices for programs that they want to see, event if no one is in the same location as the recording device. This is accomplished by accessing an enhanced automatic router unit that is in communication with any device that may recognize an incoming call (e.g., answering machine, modified caller ID box, etc.).

[0005] The present invention is part of a system/method that allows users to contact a central site and leave instructions for their media recording devices. In one embodiment, users may be signed up purchasers of registered remote units.

[0006] The remote user can contact the central site via any Internet accessing device, phone (wire/wireless), fax, etc. The user may then supply requested information to enable the central site to access and set the user's recording device. The enhanced automatic router (EA router) may be attached to a modified Caller ID Box, a phone line with a standard answering machine, a computer, a cable line, etc. The media recording device can be one of a variety of media storage devices including, but not limited to, tape (e.g., VCR), digital (e.g., TiVo), laser (write-able compact disk), etc.

[0035] In one embodiment, the EA router 120A works by mimicking. The infrared emitter 192 (FIG. 2A) component of the EA router 120A can mimic the manufacture's remote control device code signals. This enables the user to key in instructions from a remote site and have the EA router 120A act as their proxy in

issuing instruction to their recorder.

[0071] FIG. 6 illustrates an embodiment of the present invention for accessing and controlling a recording device situated in a remote location. These processes are accomplished by EA router 120A and is described below with reference to FIGS. 2A and 6. The EA router 120A monitors a telephone line for activity, detects whether a potential activity on the phone line allows incoming instructions, captures such instructions and transmits them to an intended device.

Mankovitz's patent does not teach on DTMF tones encoding information being transmitted by a central server over a telecommunication network to a site remote to both the server and the remote data entry terminal. There are only two locations in Mankovitz's patent (Figure 1, 4, 5, 6, and 7 & Col. 1, line 36 – line 52 & Col. 2, line 20 – line 29).

Claims 62 and 73 are allowable

Regarding claim(s) 63, 74,107 and 124, Mankovitz discloses a method, wherein the DTMF tones encoding information are transmitted over the Internet to a central server where information and instructions are extracted and process before being processed on to a remote targeted site where said instructions call affect the future behavior of an appliance (column 4, lines 43-53).

The word "Internet" is absent from Mankovitz's patent. There is not teaching what so ever about communicating information over the Internet, or the World Wide Web.

Claims 63, 74,107 and 124 are allowable

Regarding claim(s) 64, 75, 82, 86 and 108, Mankovitz discloses a method, further comprising:

a device at the remote site converting said DTMF tones received from the central computer into infrared light signals containing instructions that call control the behavior of the targeted appliance (column 4, line43-53).

Claims 64, 75, 82, 86 and 108 are allowable as dependent claim

Regarding claim(s) 65, 76, 83 and 86, Mankovitz discloses a method, further comprising: a device at the remote site converting said DTMF tones received from the central computer into audio signals containing instructions that call control the behavior of the targeted appliance (column 4, lines 11-26).

Claims 65, 76, 83, and 86 are allowable as dependent claim

Regarding claim(s) 66, 77, 84 and 85, Mankovitz discloses a method, further comprising:

the device at the remote site converting said DTMF tones received from the central computer into electrical signals containing instructions that are conveyed by cable to the target appliance, and wherein said instructions will control the future behavior of the targeted appliance (column 4, lines 35-42).

Claims 66, 77, 85, and 85 are allowable as dependent claim

35 U.S.C. 112 Specification. - Patent Laws

35 U.S.C. 112 Specification

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

A claim may be written in independent or, if the nature of the case admits, in dependent or multiple dependent form.

Subject to the following paragraph, a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.

A claim in multiple dependent form shall contain a reference, in the alternative only, to more than one claim previously set forth and then specify a further limitation of the subject matter claimed. A multiple dependent claim shall not serve as a basis for any other multiple dependent claim. A multiple dependent claim shall be construed to incorporate by reference all the limitations of the particular claim in relation to which it is being considered.

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

(Amended July 24, 1965, Public Law 89-83, sec. 9, 79 Stat. 261; Nov. 14, 1975, Public Law 94-131, sec. 7, 89 Stat. 691.)

35 U.S.C. 113 Drawings. - Patent Laws

35 U.S.C. 113 Drawings.

The applicant shall furnish a drawing where necessary for the understanding of the subject matter sought to be patented. When the nature of such subject matter admits of illustration by a drawing and the applicant has not furnished such a drawing, the Director may require its submission within a time period of not less than two months from the sending of a notice thereof. Drawings submitted after the filing date of the application may not be used (i) to overcome any insufficiency of the specification due to lack of an enabling disclosure or otherwise inadequate disclosure therein, or (ii) to supplement the original disclosure thereof for the purpose of interpretation of the scope of any claim.

(Amended Nov. 14, 1975, Public Law 94-131, sec. 8, 89 Stat. 691; Nov. 29, 1999, Public Law 106-113, sec. 1000(a)(9), 113 Stat. 1501A-582 (S. 1948 sec. 4732(a)(10)(A)).)

2181 Identifying a 35 U.S.C. - 2100 Patentability

2181 Identifying a 35 U.S.C. 112, Sixth Paragraph Limitation [R-3]

This section sets forth guidelines for the examination of 35 U.S.C. 112, sixth paragraph, "means or step plus function" limitations in a claim. These guidelines are based on the Office's current understanding of the law and are believed to be fully consistent with binding precedent of the Supreme Court, the Federal Circuit and the Federal Circuit's predecessor courts. These guidelines do not constitute substantive rulemaking and hence do not have the force and effect of law.

The Court of Appeals for the Federal Circuit, in its en banc decision *In re Donaldson Co.*, 16 F.3d 1189, 29 USPQ2d 1845 (Fed. Cir. 1994), decided that a "means-or-step-plus-function" limitation should be interpreted in a manner different than patent examining practice had previously dictated. The Donaldson decision affects only the manner in which the scope of a "means or step plus function" limitation in accordance with 35 U.S.C. 112, sixth paragraph, is interpreted during examination. Donaldson does not directly affect the manner in which any other section of the patent statutes is interpreted or applied.

When making a determination of patentability under 35 U.S.C. 102 or 103, past practice was to interpret a "means or step plus function" limitation by giving it the "broadest reasonable interpretation." Under the PTO's long-standing practice this meant interpreting such a limitation as reading on any prior art means or step which performed the function specified in the claim without regard for whether the prior art means or step

was equivalent to the corresponding structure, material or acts described in the specification. However, in Donaldson, the Federal Circuit stated:

Per our holding, the "broadest reasonable interpretation" that an examiner may give means-plus-function language is that statutorily mandated in paragraph six. Accordingly, the PTO may not disregard the structure disclosed in the specification corresponding to such language when rendering a patentability determination.

I. LANGUAGE FALLING WITHIN 35 U.S.C. 112, SIXTH PARAGRAPH

The USPTO must apply 35 U.S.C. 112, sixth paragraph in appropriate cases, and give claims their broadest reasonable interpretation, in light of and consistent with the written description of the invention in the application. See Donaldson, 16 F.3d at 1194, 29 USPQ2d at 1850 (stating that 35 U.S.C. 112, sixth paragraph "merely sets a limit on how broadly the PTO may construe

means-plus-function language under the rubric of reasonable interpretation.""). The Federal Circuit has held that applicants (and reexamination patentees) before the USPTO have the opportunity and the obligation to define their inventions precisely during proceedings before the PTO. See *In re Morris*, 127 F.3d 1048, 1056-57, 44 USPQ2d 1023, 1029-30 (Fed. Cir. 1997) (35 U.S.C. 112, second paragraph places the burden of precise claim drafting on the applicant); *In re Zletz*, 893 F.2d 319, 322, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) (manner of claim interpretation that is used by courts in litigation is not the manner of claim interpretation that is applicable during prosecution of a pending application before the PTO); *Sage Prods., Inc. v. Devon Indus., Inc.*, 126 F.3d 1420, 1425, 44 USPQ2d 1103, 1107 (Fed. Cir. 1997) (patentee who had a clear opportunity to negotiate

broader claims during prosecution but did not do so, may not seek to expand the claims through the

doctrine of equivalents, for it is the patentee, not the public, who must bear the cost of failure to seek protection for this foreseeable alteration of its claimed structure). Applicants and reexamination patentees before the USPTO have an opportunity and obligation to specify, consistent with these guidelines, when a claim limitation invokes 35 U.S.C. 112, sixth paragraph.

A claim limitation will be interpreted to invoke 35 U.S.C. 112, sixth paragraph, if it meets the following 3-prong analysis:

- (A) the claim limitations must use the phrase "means for" or "step for;"
- (B) the "means for" or "step for" must be modified by functional language; and
- (C) the phrase "means for" or "step for" must not be modified by sufficient structure, material or acts for achieving the specified function.

With respect to the first prong of this analysis, a claim element that does not include the phrase "means for" or "step for" will not be considered to invoke 35 U.S.C. 112, sixth paragraph. If an applicant wishes to have the claim limitation treated under 35 U.S.C. 112, sixth paragraph, applicant must either: (A) amend the claim to include the phrase "means for" or "step for" in

accordance with these guidelines; or (B) show that even though the phrase "means for" or "step for" is not used, the claim limitation is written as a function to be performed and does not recite sufficient structure, material, or acts which would preclude application of 35 U.S.C. 112, sixth paragraph. See *Watts v. XL Systems, Inc.*, 232 F.3d 877, 56 USPQ2d 1836 (Fed. Cir. 2000)

(Claim limitations were held not to invoke 35 U.S.C. 112, sixth paragraph, because the absence of the term "means" raised the presumption that the limitations were not in means-plus-function form, nor was the presumption rebutted.); see also *Masco Corp. v. United States*, 303 F.3d 1316, 1327, 64 USPQ2d 1182, 1189 (Fed. Cir. 2002) ("[W]here a method claim does not contain

the term 'step[s] for,' a limitation of that claim cannot be construed as a step-plus-function limitation without a showing that the limitation contains no act.").

While traditional "means for" or "step for" language does not automatically make an element a means-(or step-) plus-function element, conversely, lack of such language does not prevent a limitation from being construed as a means-(or step-) plus-function limitation. See *Signtech USA, Ltd. v. Vutek, Inc.*, 174 F.3d 1352, 1356, 50 USPQ2d 1372, 1374- 75 (Fed. Cir.1999) ("ink delivery means positioned on ." invokes 35 U.S.C. 112, sixth paragraph since

the phrase "ink delivery means" is equivalent to "means for ink delivery"); *Al-Site Corp. v. VSI Int'l, Inc.*, 174 F.3d 1308, 1317-19, 50 USPQ2d 1161, 1166-67 (Fed. Cir. 1999) (although the claim elements "eyeglass hanger member" and "eyeglass contacting member" include a function, these claim elements do not invoke 35 U.S.C. 112, sixth paragraph because the claims themselves

contain sufficient structural limitations for performing these functions); *Seal-Flex, Inc. v. Athletic Track and Court Construction*, 172 F.3d 836, 850, 50 USPQ2d 1225, 1234 (Fed. Cir. 1999) (Radar, J., concurring) ("claim elements without express step-plus-function

language may nevertheless fall within 112 6 if they merely claim the underlying function without recitation of acts for

performing that function. In general terms, the underlying function' of a method claim element corresponds to what that element ultimately accomplishes in relationship to what the other elements of the claim and the claim as a whole accomplish. Acts,' on the other hand, correspond to how the function is accomplished. If the claim element uses the phrase step for,' then § 112, 6 is presumed to apply. On the other hand, the term step' alone and the phrase steps of' tend to show that § 112, 6 does not govern that limitation."); *Personalized Media Communications LLC v. ITC*, 161 F.3d 696, 703- 04, 48 USPQ2d 1880, 1886- 87 (Fed. Cir. 1998); *Mas-Hamilton Group v. LaGard Inc.*, 156 F.3d 1206, 1213, 48 USPQ2d 1010, 1016 (Fed. Cir. 1998) ("lever moving element for

moving the lever" and "movable link member for holding the lever. and for releasing the lever" were construed as means-plus-function limitations invoking 35 U.S.C. 112, sixth paragraph since the claimed limitations were described in terms of their function not their mechanical structure); *Ethicon, Inc. v. United States Surgical Corp.*, 135 F.3d 1456, 1463, 45 USPQ2d 1545, 1550 (Fed. Cir. 1998) ("use of the word means 'gives rise to a presumption that the inventor used the term advisedly to invoke the statutory mandates for means-plus-function clauses"); *O.I. Corp. v. Tekmar*, 115 F.3d 1576, 1583, 42 USPQ2d 1777, 1782 (Fed. Cir. 1997) (method claim that paralleled means-plus-function apparatus claim but lacked "step for" language did not invoke 35 U.S.C. 112, sixth paragraph). Thus, absent an express recitation of "means for" or "step for" in the limitation, the broadest reasonable interpretation will not be limited to "corresponding structure. and equivalents thereof." *Morris*, 127 F.3d at 1055, 44 USPQ2d at 1028 ("no comparable mandate in the

patent statute that relates the claim scope of non-§ 112 paragraph 6 claims to particular matter found in the specification").

With respect to the second prong of this analysis, see *York Prod., Inc. v. Central Tractor Farm & Family Center*, 99 F.3d 1568, 1574, 40 USPQ2d 1619, 1624 (Fed. Cir. 1996) (holding that a claim limitation containing the term "means" does not invoke 35 U.S.C. 112, sixth paragraph, if the claim limitation does not link the term "means" to a specific function). It must be clear that the

element in the claims is set forth, at least in part, by the function it performs as opposed to the specific structure, material, or acts that perform the function. See also *Caterpillar Inc. v. Detroit Diesel Corp.*, 41 USPQ2d 1876, 1882 (N.D. Ind. 1996) (35 U.S.C. 112, sixth paragraph, "applies to functional method claims where the element at issue sets forth a step for reaching a particular result, but not the specific technique or procedure used to achieve the result."); *O.I. Corp.*, 115 F.3d at 1582-83, 42 USPQ2d at 1782 (With respect to process claims, "[35 U.S.C. 112, sixth paragraph] is implicated only when steps plus function without acts are present. If we were to construe every process claim containing steps described by an 'ing' verb, such as passing, heating, reacting, transferring, etc., into a step-plus-function, we would be limiting process claims in a manner never

intended by Congress." (Emphasis in original).). However, "the fact that a particular mechanism is defined in functional terms is not sufficient to convert a claim element containing that term into a 'means for performing a specified function' within the meaning of section 112(6)." *Greenberg v. Ethicon Endo-Surgery, Inc.*, 91 F.3d 1580, 1583, 39 USPQ2d 1783, 1786 (Fed. Cir. 1996) ("detent mechanism" defined in functional terms was

not intended to invoke 35 U.S.C. 112, sixth paragraph). See also *Al-Site Corp. v. VSI International Inc.*, 174 F.3d 1308, 1318, 50 USPQ2d 1161, 1166-67 (Fed. Cir. 1999) (although the claim elements "eyeglass hanger member" and "eyeglass contacting member" include a function, these claim elements do not invoke 35 U.S.C. 112, sixth paragraph, because the claims themselves contain sufficient structural limitations for performing those functions). Also, a statement of function appearing only in the claim preamble is generally insufficient to invoke 35 U.S.C. 112, sixth paragraph. *O.I. Corp.*, 115 F.3d at 1583, 42 USPQ2d at 1782 ("[A] statement in a preamble of a result that necessarily follows from performing a series of steps does not convert each of those steps into step-plus-function clauses. The steps of 'passing' are not individually associated in the claims with functions performed by the steps of passing.").

With respect to the third prong of this analysis, see *Seal-Flex*, 172 F.3d at 849, 50 USPQ2d at 1234 (Radar, J., concurring) ("Even when a claim element uses language that generally falls under the step-plus-function format, however, 112 ¶ 6 still does not apply when the claim limitation itself recites sufficient acts for performing the specified function."); *Envirco Corp. v. Clestra Cleanroom, Inc.*, 209 F.3d 1360, 54 USPQ2d 1449 (Fed. Cir. 2000) (holding "second baffle means" does not invoke 35 U.S.C. 112, sixth paragraph, because the word "baffle" itself imparts structure and the claim further recites the structure of the baffle); *Rodime PLC v. Seagate Technology, Inc.*, 174 F.3d 1294, 1303-04, 50 USPQ2d 1429, 1435-36 (Fed. Cir. 1999) (holding "positioning means for moving" does not invoke 35 U.S.C. 112, sixth paragraph, because the claim further provides a list of the structure underlying the means and the detailed recitation of the

structure for performing the moving function removes this element from the purview of 35 U.S.C. 112, sixth paragraph); *Cole v. Kimberly-Clark Corp.*, 102 F.3d 524, 531, 41 USPQ2d 1001, 1006 (Fed. Cir. 1996) (holding "perforation means for tearing" does not invoke 35 U.S.C. 112, sixth paragraph, because the claim describes the structure supporting the tearing function (i.e., perforation)). In other cases, the Federal Circuit has held otherwise. See *Unidynamics Corp. v. Automatic Prod. Int'l*, 157 F.3d 1311, 1319, 48 USPQ2d 1099, 1104 (Fed. Cir. 1998) (holding "spring means" does invoke 35 U.S.C. 112, sixth paragraph). During examination, however, applicants have the opportunity and the obligation to define their inventions precisely, including whether a claim limitation invokes 35 U.S.C. 112, sixth paragraph. Thus, if the phrase "means for" or "step for" is modified by sufficient structure, material or acts for achieving the specified function, the USPTO will not apply 35 U.S.C. 112, sixth paragraph, until such modifying language is deleted from the claim limitation.

It is necessary to decide on an element by element basis whether 35 U.S.C. 112, sixth paragraph, applies. Not all terms in a means-plus-function or step-plus-function clause are limited to what is disclosed in the written description and equivalents thereof, since 35 U.S.C. 112, sixth paragraph, applies only to the interpretation of the means or step that performs the recited function. See, e.g., *IMS Technology Inc. v. Haas Automation Inc.*, 206 F.3d 1422, 54 USPQ2d 1129 (Fed. Cir. 2000) (the term "data block" in the phrase "means to sequentially display data block inquiries" was not the means that caused the sequential display, and its meaning was not limited to the disclosed embodiment and equivalents thereof.). Each claim must be independently reviewed to determine the

applicability of 35 U.S.C. 112, sixth paragraph, even where the application contains substantially similar process and apparatus claims. O.I. Corp., 115 F.3d at 1583-1584, 42 USPQ2d at 1782 ("We understand that the steps in the method claims are essentially in the same language as the limitations in the apparatus claim, albeit without the 'means for' qualification. Each claim must be independently reviewed in order to determine if it is subject to the requirements of section 112, ¶ 6. Interpretation of claims would be confusing indeed if claims that are not means- or step- plus function were to be interpreted as if they were, only because they use language similar to that used in other claims that are subject to this provision."). >Where a claim limitation meets the 3-prong analysis and is being treated under 35 U.S.C. 112, sixth paragraph, the examiner will include a statement in the Office action that the claim limitation is being treated under 35 U.S.C. 112, sixth paragraph. However, if a claim limitation does not use the phrase

"means for" or "step for," that is, the first prong of the 3-prong analysis is not met, the examiner will not treat such a claim limitation under 35 U.S.C. 112, sixth paragraph. It will not be necessary to state in the Office action that 35 U.S.C. 112, sixth paragraph, has not been invoked, since the presumption is that applicant did not intend to invoke the provisions of 35 U.S.C. 112, sixth paragraph, because applicant did not use the specific phrase "means for" or "step for." ***If a claim limitation does include the phrase "means for" or "step for," that is, the first prong of the 3-prong analysis is met, but the examiner determines that either the second prong or the third prong of the 3-prong analysis is not met, then in these situations, the examiner must include a statement in the Office action explaining the reasons why a claim limitation which uses the phrase "means for" or "step for" is not being treated under 35 U.S.C. 112, sixth paragraph.< Accordingly, these***

guidelines provide applicants with the opportunity to either invoke or not invoke 35

U.S.C. 112, sixth paragraph, based upon a clear and simple set of criteria. **>The

following examples illustrate situations where the phrase "means for" or "step for" was not used but the Board or the courts determined that the claim limitation falls within the scope of 35 U.S.C. 112, sixth paragraph. Note that the examples are fact specific and should not be applied as per se rules. As noted above, examiners should apply the 3-prong analysis to determine whether the claim limitation will be interpreted to invoke 35 U.S.C. 112, sixth paragraph. A claim element that does not include the phrase "means for" or "step for" will not be considered to invoke 35 U.S.C. 112, sixth paragraph. If an applicant wishes to have the claim limitation treated under

35 U.S.C. 112, sixth paragraph, applicant must either amend the claim to include the phrase "means for" or "step for," or show that even though the phrase "means for" or "step for" is not used, the claim limitation is written as a function to be performed and does not recite sufficient structure, material, or acts which would preclude application of 35 U.S.C. 112, sixth paragraph.<

(A) a jet driving device so constructed and located on the rotor as to drive the rotor . . .

["means" unnecessary]. The term "device" coupled with a function is a proper definition of structure in accordance with the last paragraph of 35 U.S.C. 112. The addition of the words "jet driving" to the

term "device" merely renders the latter more definite and specific. Ex parte Stanley, 121 USPQ 621 (Bd. App. 1958);

(B) "printing means" and "means for printing" which would have the same connotations.

Ex parte Klumb, 159 USPQ 694 (Bd. App. 1967). However, the terms "plate" and "wing," as modifiers for the structureless term "means," specify no function to be performed, and do not fall under the last paragraph of 35 U.S.C. 112;

(C) force generating means adapted to provide . . . De Graffenreid v. United States, 20 Ct. Cl. 458, 16 USPQ2d 1321 (Ct. Cl. 1990);

(D) call cost register means, including a digital display for providing a substantially instantaneous display for . . . Intellicall Inc. v. Phonometrics, Inc., 952 F.2d 1384, 21 USPQ2d 1383 (Fed. Cir. 1992);

(E) reducing the coefficient of friction of the resulting film [step plus function; "step" unnecessary], In re Roberts, 470 F.2d 1399, 176 USPQ 313 (CCPA 1973); and

(F) raising the pH of the resultant pulp to about 5.0 to precipitate . . . Ex parte Zimmerley, 153 USPQ 367 (Bd. App. 1966).

In the event that it is unclear whether the claim limitation falls within the scope of 35 U.S.C. 112, sixth paragraph, a rejection under 35 U.S.C. 112, second paragraph may be appropriate.

II. WRITTEN DESCRIPTION NECESSARY TO SUPPORT A CLAIM LIMITATION
WHICH

INVOKES 35 U.S.C. 112, SIXTH PARAGRAPH

35 U.S.C. 112, sixth paragraph states that a claim limitation expressed in means-plus-function language "shall be construed to cover the corresponding structure described in the specification and equivalents thereof." "If one employs means plus function language in a claim, one must set forth in the specification an adequate disclosure showing what is meant by that language.

If an applicant fails to set forth an adequate disclosure, the applicant has in effect failed to particularly point out and distinctly claim the invention as required by the second paragraph of section 112." *In re Donaldson Co.*, 16 F.3d 1189, 1195, 29 USPQ2d 1845, 1850 (Fed. Cir. 1994) (in banc).

The proper test for meeting the definiteness requirement is that the corresponding structure (or material or acts) of a means (or step)-plus-function limitation must be disclosed in the specification itself in a way that one skilled in the art will understand what structure (or material or acts) will perform the recited function. See *Atmel Corp. v. Information Storage Devices, Inc.*, 198 F.3d 1374, 1381, 53 USPQ2d 1225, 1230 (Fed. Cir. 1999). In *Atmel*, the patentee claimed an apparatus that included a "high voltage generating means" limitation, thereby invoking 35 U.S.C. 112, sixth paragraph. The specification incorporated by reference a non-patent document from a technical journal, which described a particular high voltage generating circuit. The Federal Circuit concluded that the title of the article in the specification may, by itself, be sufficient to indicate to one skilled in the art the precise structure of the means for performing the recited function, and it remanded the case to the district court "to consider

the knowledge of one skilled in the art that indicated, based on unrefuted testimony, that the specification disclosed sufficient structure corresponding to the high-voltage means limitation." *Id.* at 1382, 53 USPQ2d at 1231.

The disclosure of the structure (or material or acts) may be implicit or inherent in the specification if it would have been clear to those skilled in the art what structure (or material or acts) corresponds to the means (or step)-plus-function claim limitation. See *Id.* at 1380, 53 USPQ2d at 1229; *In re Dossel*, 115 F.3d 942, 946-47, 42 USPQ2d 1881, 1885 (Fed. Cir. 1997). If there is no disclosure of structure, material or acts for performing the recited function, the claim fails to satisfy the requirements of 35 U.S.C. 112, second paragraph. *Budde v. Harley-Davidson, Inc.*, 250 F.3d 1369, 1376, 58 USPQ2d 1801, 1806 (Fed. Cir. 2001); *Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.*, 296 F.3d 1106, 1115-18, 63 USPQ2d 1725, 1731-34 (Fed. Cir. 2002) (Court interpreted the language of the "third monitoring means for monitoring the ECG signal for activating ." to require the same means to perform both functions and the only entity referenced in the specification that could possibly perform both functions is the physician. The court held that excluding the physician, no structure accomplishes the claimed dual functions. Because no structure disclosed in the embodiments of the invention actually performs the claimed dual functions, the specification lacks corresponding structure as required by 35 U.S.C. 112, sixth paragraph, and fails to comply with 35 U.S.C. 112, second paragraph.).

Whether a claim reciting an element in means- (or step-) plus-function language fails to comply with 35 U.S.C. 112, second paragraph, because the specification does not disclose adequate structure (or material or acts) for performing the recited function is closely related to the question of whether the specification meets the description

requirement in 35 U.S.C. 112, first paragraph. See *In re Noll*, 545 F.2d 141, 149, 191 USPQ 721, 727 (CCPA 1976) (unless the means-plus-function language is itself unclear, a claim limitation written in means-plus-function language meets the definiteness requirement in 35 U.S.C. 112, second paragraph, so long as the specification meets the written description requirement in 35 U.S.C. 112, first paragraph). However,

35 U.S.C. 112, sixth paragraph, does not impose any requirements in addition to those imposed by 35 U.S.C. 112, first paragraph. See *In re Knowlton*, 481 F.2d 1357, 1366, 178 USPQ 486, 492-93 (CCPA 1973). Conversely, the invocation of 35 U.S.C. 112, sixth paragraph, does not exempt an applicant from compliance with 35 U.S.C. 112, first and second paragraphs. See *Donaldson*, 16 F.3d at 1195, 29 USPQ2d at 1850; *Knowlton*, 481 F.2d at 1366, 178 USPQ at 493. Under certain limited circumstances, the written description does not have to explicitly describe the structure (or material or acts) corresponding to a means- (or step-) plus-function limitation to particularly point out and distinctly claim the invention as required by 35 U.S.C. 112, second paragraph. See *Dossel*, 115 F.3d at 946, 42 USPQ2d at 1885. Under proper circumstances, drawings may provide a written description of an invention as required by 35 U.S.C. 112. *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1565, 19 USPQ2d 1111, 1118 (Fed. Cir. 1991). Rather, disclosure of structure corresponding to a means-plus-function limitation may be implicit in the written description if it would have been clear to those skilled in the art what structure must perform the function recited in the means-plus-function limitation. See *Atmel Corp. v. Information Storage Devices Inc.*, 198 F.3d 1374, 1379, 53 USPQ2d 1225, 1228 (Fed. Cir. 1999) (stating that the "one skilled in the art" analysis should apply in determining whether sufficient structure has been disclosed to support a means-plus-

function limitation and that the USPTO's recently issued proposed Supplemental Guidelines are consistent with the court's holding on this point); Dossel, 115 F.3d at 946-47, 42 USPQ2d at 1885 ("Clearly, a unit which receives digital data, performs complex mathematical

computations and outputs the results to a display must be implemented by or on a general or special purpose computer (although it is not clear why the written description does not simply state 'computer' or some equivalent phrase.)").

III. DETERMINING 35 U.S.C. 112 SECOND PARAGRAPH COMPLIANCE WHEN 35 U.S.C. 112 SIXTH PARAGRAPH IS INVOKED

The following guidance is provided to determine whether applicant has complied with the requirements of 35 U.S.C. 112, second paragraph, when 35 U.S.C. 112, sixth paragraph, is invoked:

(A) If the corresponding structure, material or acts are described in the specification in specific terms (e.g., an emitter-coupled voltage comparator) and one skilled in the art could identify the structure, material or acts from that description, then the requirements of 35 U.S.C. 112, second and sixth paragraphs are satisfied. See *Atmel*, 198 F.3d at 1382, 53 USPQ2d 1231.

(B) If the corresponding structure, material or acts are described in the specification in broad generic terms and the specific details of which are incorporated by reference to another document (e.g., attachment means disclosed in U.S. Patent No. X, which is hereby incorporated by reference, or

a comparator as disclosed in the IBM article, which is hereby incorporated by reference), Office personnel must review the description in the specification, without relying on any

material from the incorporated document, and apply the "one skilled in the art" analysis to determine whether one skilled in the art could identify the corresponding structure (or material or acts) for performing the recited function to satisfy the definiteness requirement of 35 U.S.C. 112, second paragraph. >See Default Proof Credit Card System, Inc. v. Home Depot U.S.A., Inc., ___ F.3d ___, 75 USPQ2d 1116 (Fed. Cir. 2005) ("The inquiry under [35 U.S.C.] § 112, ¶ 2, does not turn on whether a patentee has 'incorporated by reference' material into the specification relating to

structure, but instead asks first 'whether structure is described in the specification, and, if so, whether one skilled in the art would identify the structure from that description').<

(1) If one skilled in the art would be able to identify the structure, material or acts from the description in the specification for performing the recited function, then the requirements of 35 U.S.C. 112, second paragraph, are satisfied. See Dossel, 115 F.3d at 946-47, 42 USPQ2d at 1885 (The function recited in the means-plus-function limitation involved "reconstructing" data.

The issue was whether the structure underlying this "reconstructing" function was adequately described in the written description to satisfy 35 U.S.C. 112, second paragraph. The court stated that "[n]either the written description nor the claims uses the magic word 'computer,' nor do they quote computer code that may be used in the invention. Nevertheless, when the written description

is combined with claims 8 and 9, the disclosure satisfies the requirements of Section 112, Para. 2." The court concluded that based on the specific facts of the case, one skilled in the art would recognize the structure for performing the "reconstructing" function since "a unit

which receives digital data, performs complex mathematical computations and outputs the results to a display must be implemented by or on a general or special purpose computer.").

See also Intel Corp. v. VIA Technologies, Inc, 319 F.3d 1357, 1366, 65 USPQ2d 1934, 1941 (Fed. Cir. 2003) (The "core logic" structure that was modified to perform a particular program was held to be adequate corresponding structure for a claimed function although the specification did not disclose internal circuitry of the core logic to show exactly how it must be modified.)

(2) If one skilled in the art would not be able to identify the structure, material or acts from description in the specification for performing the recited function, then applicant will be required to amend the specification to include the material incorporated by reference and to clearly link or associate the structure, material or acts to the function recited in the

claim. Applicant should not be required to insert the subject matter described in the entire referenced document into the specification. To maintain a concise specification, applicant should only include the relevant portions of the referenced document that correspond to the means (or step)-plus-function limitation. See Atmel, 198 F.3d at 1382, 53 USPQ2d at 1230 ("All one needs to

do is to recite some structure corresponding to the means in the specification so that one can readily ascertain what the claim means and comply with the particularity requirement of Para. 2.").

IV. DETERMINING WHETHER 35 U.S.C. 112, FIRST *>PARAGRAPH< SUPPORT EXISTS

The claims must still be analyzed to determine whether there exists corresponding adequate support for such claim under 35 U.S.C. 112, first paragraph. In considering whether there is 35 U.S.C. 112, first paragraph support for the claim limitation, the examiner must consider not only the original disclosure contained in the summary and detailed description of the invention portions of the specification, but also the original claims, abstract, and drawings. See *In re Mott*, 539 F.2d 1291, 1299, 190 USPQ 536, 542-43 (CCPA 1976) (claims); *In re Anderson*, 471 F.2d 1237, 1240, 176 USPQ 331, 333 (CCPA 1973) (claims); *Hill-Rom Co. v. Kinetic Concepts, Inc.*, **>209 F.3d 1337<, 54 USPQ2d 1437 (Fed. Cir. 2000) (unpublished) (abstract); *In re Armbruster*, 512 F.2d 676, 678-79, 185 USPQ 152, 153-54 (CCPA 1975) (abstract); *Anderson*, 471 F.2d at 1240, 176 USPQ at 333 (abstract); *Vas-Cath Inc. v. Mahurkar*, 935 F.2d at 1564, 19 USPQ2d at 1117 (drawings); *In re Wolfensperger*, 302 F.2d 950, 955-57, 133 USPQ 537, 541- 43 (CCPA 1962) (drawings). 37 CFR 1.75(d)(1) provides, in part, that "the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description." In the situation in which the written description only implicitly or inherently sets forth the structure, materials, or acts corresponding to a means- (or step-) plus-function, and the examiner concludes that one skilled in the art would recognize what structure, materials, or acts perform the function recited in a means- (or step-) plus-function, the examiner should either: (A) have the applicant clarify the record by amending the written description such that it expressly recites what structure, materials, or acts perform the function recited in the claim element; or (B) state on the record what structure, materials, or acts perform the

function recited in the means- (or step-) plus-function limitation. Even if the disclosure implicitly sets forth the structure, materials, or acts corresponding to a means- (or step-) plus-function claim element in compliance with 35 U.S.C. 112, first and second paragraphs, the USPTO may still require the applicant to amend the specification pursuant to 37 CFR 1.75(d) and MPEP § 608.01(o) to explicitly state, with reference to the terms and phrases of the claim element, what structure, materials, or acts perform the function recited in the claim element. See 35 U.S.C. 112, sixth paragraph ("An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." (emphasis added)); see also *B. Braun Medical*, 124 F.3d at 1424, 43 USPQ2d at 1900 (holding that "pursuant to this provision [35 U.S.C. 112, sixth paragraph], structure disclosed in the specification is 'corresponding' structure only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim. This duty to link or associate structure to function is the quid pro quo for the convenience of employing 112, paragraph 6."); *Medical Instrumentation and Diagnostic Corp. v. Elekta AB*, 344 F.3d 1205, 1218, 68 USPQ2d 1263, 1268 (Fed. Cir. 2003)(Although one of skill in the art would have been able to write a software program for digital to digital conversion, such software did not fall within the scope of "means for converting" images as claimed because nothing in the specification or prosecution history clearly linked or associated such software with the function of converting images into a selected format.); *Wolfensperger*, 302 F.2d at 955, 133 USPQ at 542 (just because the disclosure provides support for a claim element does not mean that

the USPTO cannot enforce its requirement that the terms and phrases used in the claims find clear support or antecedent basis in the written description).

V. SINGLE MEANS CLAIMS

Donaldson does not affect the holding of *In re Hyatt*, 708 F.2d 712, 218 USPQ 195 (Fed. Cir. 1983) to the effect that a single means claim does not comply with the enablement requirement of 35 U.S.C. 112, first paragraph. As Donaldson applies only to an interpretation of a limitation drafted to correspond to 35 U.S.C. 112, sixth paragraph, which by its terms is limited to "an element in a claim to a combination," it does not affect a limitation in a claim which is not

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Art Unit 2645

Examiner: Gauthier, Gerald
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Status Of Current Claims

Claims 56 – 125 (Unchanged)

Interview

The Applicant thanks the Examiner for his time and consideration in answering questions in the telephone interview. The Examiner agreed that the cited prior art does not teach on the User input remote terminal, central server, and the remote location of the targeted appliance. That the cited prior art Mankovitz's patent teaches on two locations: the site of the Programmer and the site of the appliance and User. It was also agreed that there was not teaching on Internet in the cited prior art. It was the Applicant understanding that the cited prior art does not meet the requirement for anticipation. The Examiner did raise questions concerning the clarity of the claims regarding location of the input terminal and the targeted device. The Applicant requests that the Examiner reconsider his opinion that the claims do not indicate three distinct locations. The Applicant is confident that the claims in general do indicate the three distinct location elements of patent, and that these and other elements distinguish it from the Mankovitz's patent as indicated in Table 1 and the specifications of the patent. The Applicant definitely stated that there are three distinct remote locations in the Claims: A remote input terminal, a central server, and a remote location at which the appliance is located (all of the Claims).

The Applicant clearly stated that there are three distinct location elements in the claim (Claim 62).

“Claim 62 (previously amended): The method according to claim 60 wherein the DTMF tones encoding information are transmitted by a central server over a telecommunication network to a site remote to both the server and the remote data entry terminal.”

According to the MPEP “Means Claims” in an Applicant’s patent application necessitate interpreting the claim with regards to the specification and illustrations contained within the said application (2181 Identifying a 35 U.S.C. 112, Sixth Paragraph Limitation [R-3]).

Per our holding, the "broadest reasonable interpretation" that an examiner may give means-plus-function language is that statutorily mandated in paragraph six. Accordingly, the PTO may not disregard the structure disclosed in the specification corresponding to such language when rendering a patentability determination.

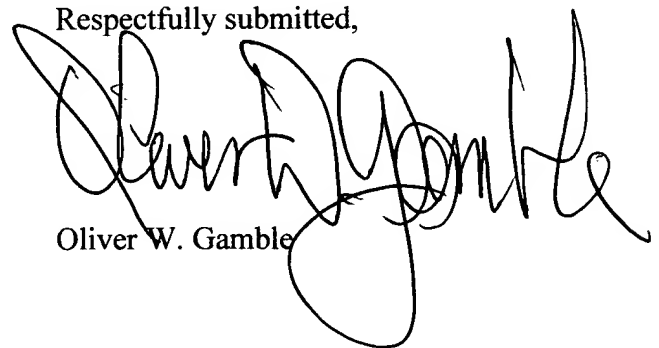
Therefore the “Means / Step Claims” clearly are to be interpreted base upon the specifications and figures in the Applicant’s patent application. The following claims are Means Claims and should automatically meet this above criteria : Claims 63, 67, 68, 69, 71, 75, 76, 77, 96, 97, 109, 112, 119, 120, 121, 122, and 123.

A clear example of this is illustrated by Mankovitz’s patent which relies almost completely on “Means and Step Claims”. The Applicant is also including other highlighted segments of the MPEP that support his position in this matter.

In the event that the Examiner reads the claims as the remote input terminal and the remote targeted appliance sharing a mutually location, both the Applicant's invention and claims are stills valid and are not anticipated by Mankovitz (US 5,915,026). The employment of a remote input terminal at the site of the appliance that is to be controlled will still necessitate thirteen of the fifteen items listed in Table 1 that distinguish the Applicant's invention from that of the Mankovitz' invention (Table 1, Item # 6 & 7). If the Examiner were to give the broadest reading on the Applicant's claims, both the patent and claim would still be an accurate description of one another. The User could enter the instructions at the site of the targeted appliance, but would not have to be present when the instructions are forwarded from the central server to the site to the targeted appliance.

The Applicant's has responded to all of the Examiner's cited concerns in the Office Action of March 24, 2006. The Applicant respectfully requests that the Examiners review the Applicant's response to the Non-Final Office Action and grant a timely decision.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Oliver W. Gamble", with a large, stylized flourish at the end.

Oliver W. Gamble